Security
Performance
Versatility

MADE IN
BRITAIN®

without compromise

mediaport®
Secure Compute & Connect™

Secure connectivity and edge processing for rapid deployment, challenging environments, and critical communications.

SONJA™

Go Prepared

"Access to secure, reliable connectivity is essential. Problem is, I never know where I'll need it next."

Go prepared for unrivalled performance in any situation: indoors and out, on the move, all-weather, in dense urban settings and remote countryside.

SONJA from Mediaport Systems bonds up to eight WANs to create near enterprise-grade connectivity, at a moment's notice, and in the most challenging environments: SONJA bonds up to four cellular, four satellite, or any combination of 5G, 4G, satellite, public WiFi, and fixed-lines.

mediaport® bondix®
by SIMA

Security

Nowadays, connectivity is at the heart of everything we do.

We expect to find fast, reliable internet wherever we go. Yet in many situations, even where we have a choice of cellular, public Wi-Fi or satellite, no single provider can consistently deliver the performance we need. Poor connectivity thwarts our productivity; inadequate security can expose individuals and businesses to intolerable threats.

In critical national infrastructure, defence, and law enforcement, the stakes are even higher. Devices that offer mobile and rapidly deployed connectivity can play life-saving roles in public safety scenarios. But if they conceal security vulnerabilities, they may turn out to be our Achilles' heel.

PROVENANCE MATTERS
In a world full of geopolitical threats, the origin of the equipment we depend on for our critical comms matters more than ever.

Organisations with a healthy aversion to risk, both government and commercial, increasingly turn to manufacturers that source critical components exclusively from trusted jurisdictions. That includes microprocessors, integrated circuits, and embedded modules deep under the hood.

Mediaport Systems designs and builds products that address the challenges of delivering ad-hoc, wide area connectivity for mission-critical applications, with emphasis on performance, utility, and security.

WITHOUT COMPROMISE
Made In Britain, with critical components sourced from trusted jurisdictions, our **SONJA** range boast a hardened security posture.

- Trusted supply chain.
- Hardware-based secure boot.
- Trusted execution environment.
- Maxim® DeepCover® TPM
- WireGuard-based tunnel encryption.
- Optional security features for approved government customers.

SECURE BOOT EXPLAINED
A read-only root private key is fused into the CPU at the time of manufacture. Additional keys and hashes are stored in the onboard Maxim DeepCover TPM.

Secure (trusted) boot guarantees the integrity of all code executed on your **SONJA**, from the very first boot instruction. It ensures only system components signed by Mediaport Systems Ltd, SIMA GmbH (for Bondix), and the silicon vendors are loaded, and it assures the authenticity of **SONJA** hardware and software.

Additional keys and hashes can be stored in the TPM, authenticated by the hardware based secure boot. These can provide a means of authenticating each **SONJA** as it connects to the server, preventing impersonation and network penetration by a cloned device.

SONJA's trusted execution environment guarantees the authenticity of its hardware and software, even if the device is used unattended in a hostile environment.

SOVEREIGNTY: In a world full of geopolitical threats, the origin of the equipment we depend on for our critical comms matters more than ever.

MADE IN BRITAIN®

without compromise

Performance

Industrial-spec, gigabit-class hardware, high-grade Telit® Cinterion modems, and real WAN bonding by Bondix®.

SONJA uses different telcos and WAN access media to create multiple diverse backhaul routes. It combines the WANs into a single, virtual connection, aggregating the available bandwidth and creating layers of redundancy.

- Combines up to eight WANs into a single virtual connection.
- Can dramatically increase bandwidth, resilience, and uptime.
- Aggregates up to 80% of the available WAN bandwidth, presenting a single fast connection to users and applications.
- Bonds upstream as well as downstream.
- Simultaneously connects to up to 4 different cellular networks for best-available coverage.

QUALITY:
When available networks are inadequate or unpredictable.
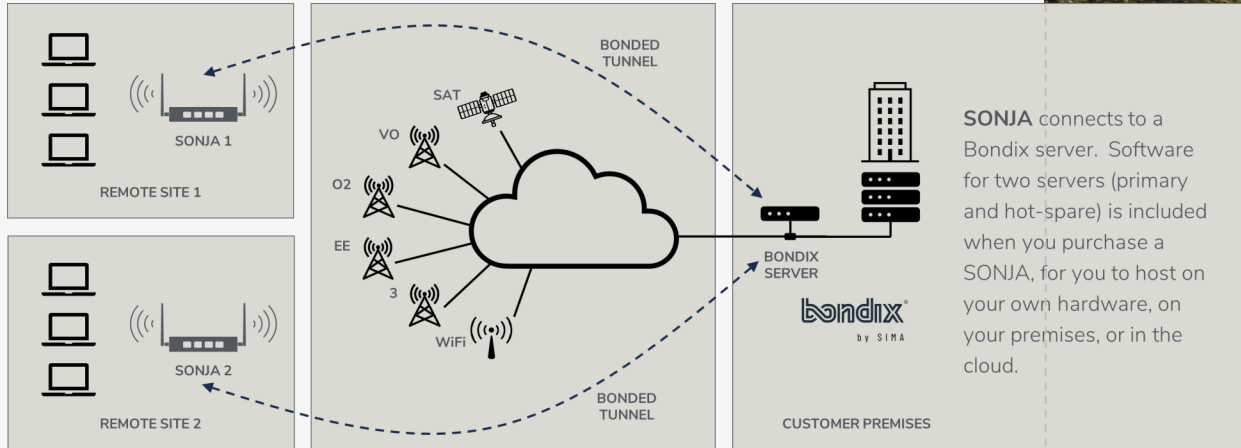
Versatility

SONJA is available in three enclosure formats, optimised for different deployment scenarios. All versions use the same industrial-spec hardware platform, with secure virtualised OS and Bondix by SIMA.

- **SONJA Rugged:** Battery portable, outdoor, IP67
- **SONJA Rackmount:** 19" x 1u, indoor or in-vehicle
- **SONJA Desktop:** Compact, indoor or in-vehicle

TYPICAL NETWORK TOPOHGRAPHY
Showing site-to-site VPN and air-gapped private networking with server at customer's premises / data centre:

REMOTE SITE 1

SONJA 1

REMOTE SITE 2

SONJA 2

BONDED TUNNEL

SAT

VO

O2

EE

3

WiFi

BONDED TUNNEL

BONDIX SERVER

bondix by SIMA

CUSTOMER PREMISES

SONJA connects to a Bondix server. Software for two servers (primary and hot-spare) is included when you purchase a SONJA, for you to host on your own hardware, on your premises, or in the cloud.

AGILITY:
Dependable private connectivity that goes where you go.

Secure Compute & Connect™

Alongside a family of standard COTS versions, **SONJA** is available with powerful edge computing capabilities to certified OEMs.

Our OEM platforms include one or more Guest VMs in which specialist apps can be securely accommodated and run, with direct access to SONJA's core gateway and WAN bonding functions via the Linux VM vSocket interface.

- Secure Guest VM(s) for edge computing by certified OEM partners.
- Potent compute-and-connect functionality in small rugged form-factors.
- Real-time interaction between apps and router functions via API.
- Reduced box count optimises SWaP (size, weight, power) and reduces hardware costs.

VIRTUALISATION

Built on a flexible industrial platform with an open source Linux ecosystem, SONJA's virtualised operating system is designed to securely accommodate and run third party apps such as video & audio encoding, data encryption, layer 2 (multicast capable) and layer 3 VPNs, IoT gateways, and Reverse Proxy services from the likes of Cloudflare®, to name but a few.

- Near-native performance using passthrough and hardware memory management.
- Powerful and low-overhead machine emulation.
- Open-source Linux ecosystem.
- Virtualisation, instead of containerisation, for deep isolation between Host and Guest VMs.
- Secure boot.

SYNERGY:

Powerful edge computing with best-of-breed hybrid connectivity, robustly packaged for the most arduous roles in security, defence, and law enforcement, amongst numerous commercial applications.

SONJA Standard Features

All versions

- 4 (or 2) x built-in high-grade Telit® Cinterion 5G modems (sub-6GHz).
- 4 x GB ethernet plus 802.11x dual-band wireless (all WAN / LAN assignable).
- 4 x Amphenol® Rugged series RJ45 connectors.
- Bondix® per-packet WAN bonding (aggregation), IP diversity (duplication), and load-balancing.
- User defined QoS.
- 3-year Bondix 1GBit/s license (option to extend).
- Server software for cloud or on-premises hosting.
- Guest VM for edge computing (available to certified OEMs).

ORDER CODES

SON-RG-0010	Rugged, 4 x 5G modems, 2 x 2 MIMO
SON-RG-0011	Rugged, 2 x 5G modems, 4 x 4 MIMO
SON-RM-0012	Rackmount, 4 x 5G modems, 4 x 4 MIMO
SON-RM-0013	Rackmount, 2 x 5G modems, 4 x 4 MIMO
SON-DT-0014	Desktop, 4 x 5G modems, 4 x 4 MIMO
SON-DT-0015	Desktop, 2 x 5G modems, 4 x 4 MIMO
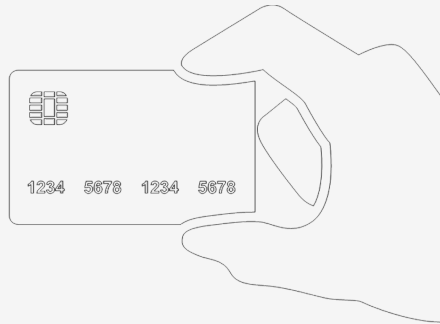
SONJA Rugged

Portable, ruggedised, and IP67 rated for mobility, rough handling and rapid deployment. Hot-swap batteries and / or external DC from universal AC adaptor, with UPS functionality.

- 186 x 164 x 44mm, 1.6kG exc. Batteries.
- Twist-lock AN/PRC148 battery connectors x 2.
- 8-33V DC input on Lemo® Motorsport series precision connector, 60W max.
- Aux O/Ps 5V DC @ 1.5A on USBC and 8-33V DC @ 3A (pass-through) on Lemo.
- Recessed SMA and RJ45 connectors.
- LED status indicators.
- Immersion breather.
- Fixing slots for cable ties or screws.
- Tough Cerakote® ceramic finish.

SONJA Rackmount & Desktop

1u high 19" rack-mountable and desktop versions for indoor and in-vehicle use.

- Rackmount 484 x 164 x 44mm, 1.58kG.
- Desktop 277 x 164 x 44mm, 1.5kG.
- 8-33V DC input on 5.5mm barrel connector, 60W max.
- Aux O/P 5V DC @ 1.5A on USBC.
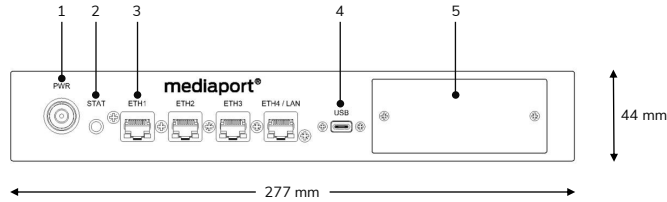- Variable speed twin push-pull fans.
- LED status indicator.

SONJA Specifications

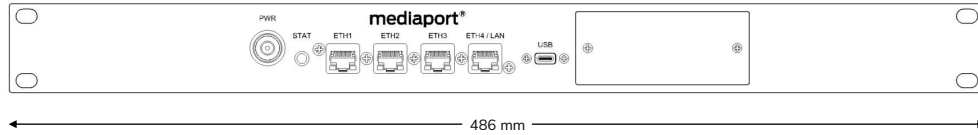| Order Codes	SON-RG-0010	SON-RG-0011	SON-RM-0012 SON-DT-0014	SON-RM-0013 SON-DT-0015
GENERAL				
Modems	4	2	4	2
Enclosure format	Rugged		19" Rackmount and Desktop	
IP Rating	IP67		IP54	
Operating temperature	-20 to +50C		0 to +50C	
Router OS	OpenWRT with Bondix® by Sima, 3 year 1Gbit/s license included			
Host OS	Linux hypervisor KVM / QEMU			
Guest VM	Ubuntu, OpenWRT, plus others available to certified OEMs			
CPU	Marvell OcteonTX™ Quad Core ARMv8, 1.5GHz			
Secure Boot	Yes			
MULTI-WAN FEATURES				
Bonding modes	Bonding / IP Diversity / Load Balancing / Seamless Handover			
QoS	User-configurable			
Encryption	ChaCha20			
Monitoring & management	Web GUI, real-time graphical monitoring			
Throughput, bonded [1]	Up to 1Gbit/s (unencrypted), 250Mbit/s (encrypted)			
Throughput, WAN breakout [1]	Up to 1Gbit/s			
CELLULAR				
Integrated 5G modems	4 x Telit Cinterion FN980	2 x Telit Cinterion FN980	4 x Telit Cinterion FN980	2 x Telit Cinterion FN980
SIM carriers	4 x Mini SIM (2FF)	2 x Mini SIM (2FF)	4 x Mini SIM (2FF)	2 x Mini SIM (2FF)
Antenna connectors	8 x SMA, 2 / modem [2]	8 x SMA, 4 / modem	16 x SMA, 4 / modem	8 x SMA, 4 / modem
Frequency bands, 5G	n1, n2, n3, n5, n8, n12, n20, n28, n41, n48, n66, n71	n1, n2, n3, n5, n7, n8, n12, n20, n25, n28, n38, n40, n41, n48, n66, n71, n77, n78, n79		
Frequency bands, LTE	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29, B30, B32, B34, B38, B39, B40, B41, B42, B43, B46, B48, B66, B71			
ETHERNET / WI-FI				
Ethernet	4 x GB ethernet (LAN / WAN assignable), Amphenol ruggedised RJ45			
WiFi	Dual band 802.11x (WLAN / WWAN assignable), 2 x SMA			

Order Codes	SON-RG-0010	SON-RG-0011	SON-RM-0012 SON-DT-0014	SON-RM-0013 SON-DT-0015
SERVER / BACK-END				
Bondix server	Licenses for two Bondix server instances included			
Hosting	By customer - cloud, on-premises or both			
POWER				
External AC	110 - 240V AC, universal mains adaptor included			
External DC	8-33V DC, 60W max			
DC connector	Lemo HEN.0M.305.XLNP		5.5 mm barrel jack	
Batteries	Twist-lock connectors for 2 x Brentronics BT-70716BV		N/A	
Hot swap batteries	Yes		N/A	
UPS functionality	AC - battery, and battery - battery		N/A	
Battery status indication	Tri-colour LEDs		N/A	
Aux power out 5V	5V at 1.5A on USB-C, auto-sensing and regulated			
Aux power out 12V (nominal)	Unregulated (pass-through), Lemo connector		N/A	
Power consumption (typical) [3]	15W idle, 20W loaded		15W idle, 25W loaded	15W idle, 20W loaded
PHYSICAL				
Dimensions	186x164x44mm		Rackmount 484 x 164 x 44mm Desktop 277 x 164 x 44mm	
Weight	1.6kG (exc. batteries)		Rackmount 1.6kG, Desktop 1.5kG	
Cooling	Passive		Dual variable speed fans, push-pull	
WARRANTY / SUPPORT [4]				
Hardware warranty	1 year limited hardware warranty			
Bondix license & software support	3 years email support & software updates			

Note 1 - Throughput depends on WAN performance. Note 2 - The availability of 5G and certain frequency bands on MPC-0010 depends on the network operator's policies regarding the use of two antenna. Note 3 - Figures for typical "loaded" power consumption are provisional and subject to review. Note 4 - Bondix license and software support can be extended by purchasing Service Extensions. Specifications subject to change without notice. E&OE.
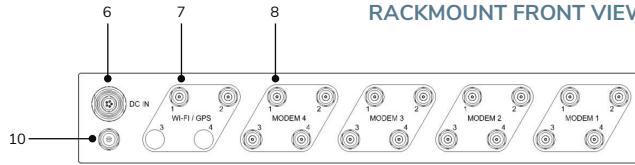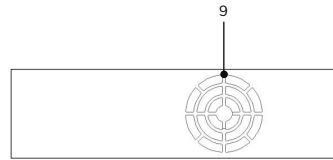
SONJA Rackmount & Desktop

1 2 3   4   5

PWR
STAT ETH1 ETH2 ETH3 ETH4 / LAN USB

44 mm

277 mm

DESKTOP FRONT VIEW

PWR STAT ETH1 ETH2 ETH3 ETH4 / LAN USB

486 mm

RACKMOUNT FRONT VIEW

6   7   8

DC IN WI-FI / GPS MODEM 4 MODEM 3 MODEM 2 MODEM 1

10

9

164 mm

REAR VIEW   **LHS VIEW**

SONJA Rugged

1 3   4 6

PWR ETH1 ETH2 ETH3 ETH4 / LAN USB DC

186 mm

FRONT VIEW

11 12 13

REAR VIEW

5   14

EXT
BAT 1
BAT 2
STATUS

TOP VIEW

8   7

< BAT 2   1 5G / LTE 2 WLAN 3 5G / LTE 4

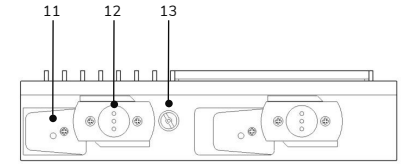44 mm

164 mm

LHS VIEW

5 5G / LTE 6 WLAN 7 5G / LTE 8 BAT 1 >

RHS VIEW

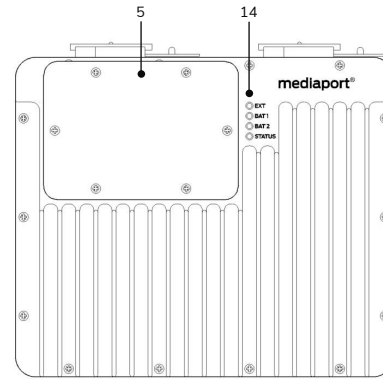|				
1	POWER BUTTON	6	DC INPUT (LEMO CONNECTOR OPTIONAL ON DESKTOP & RACKMOUNT)	
2	STATUS LED	7	RP-SMA FEMALE WIFI ANTENNA CONNECTORS	
3	ASSIGNABLE LAN / WAN PORTS	8	SMA FEMALE 5G ANTENNA CONNECTORS	
4	USBC CONNECTOR	9	FAN	
5	SIM COMPARTMENT			
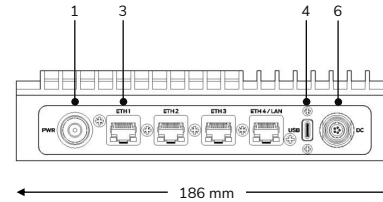
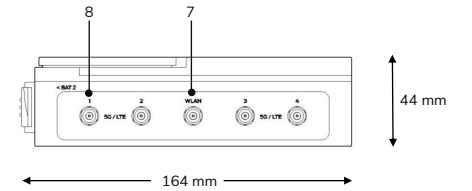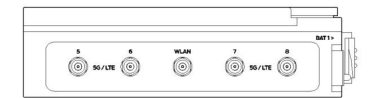|	
10	DC INPUT (BARREL CONNECTOR)
11	BATTERY LOCK SPRINGS
12	BATTERY CONNECTORS
13	IMMERSION BREATHER
14	BATTERY AND STATUS LEDs

The Team behind Mediaport

JOHNNIE DYMOCK, CEO is responsible for the Mediaport concept and design. He has a 30+ year track record of providing technology solutions and services to the world's top entertainment and media brands, and is an expert in multi-WAN technology for mission-critical applications. He holds SC clearance with the UK Ministry of Defence and works closely with defence and law-enforcement, using feedback from specialist users to shape the products and solutions he designs.

ANTHONY FAUST, CTO is the solutions architect behind our virtualised designs and is responsible for overseeing software development, testing, and quality control. Based in Montreal, Anthony works closely with North American partners providing product support and technical training. Anthony has a background in film and television engineering and a strong predilection for solutions engineering and software development.

GÜNTER HÜNDL, CTO is an experienced financial controller with skills in corporate management, accounting, budget planning, project management, marketing, legal affairs and human resources. He has a Diplom-Kaufmann (MBA) in Business Management from Ludwig-Maximilians-Universität in Munich, a Bachelor of International Trading from Bayerische Akademie für Außenwirtschaft, and was CFO of the Viprinet from 2011-2014.

MARTIN SANTNER, SALES CONSULTANT has 15+ years of experience selling specialist connectivity solutions, and has built an extensive global network of resellers and end users. He is a founder and the head of international business development at SIMA GmbH, a title he previously held at Viprinet. Martin combines strong selling skills with a deep technical understanding of the solutions he represents.

SIMON LEY, SOFTWARE CONSULTANT is a skilled development engineer with more than 15 years experience at Viprinet, Microsoft, and currently SIMA GmbH, where is a founding partner. At SIMA, he has been responsible for designing and implementing the Bondix WAN bonding protocol from the ground up. Simon manages a team of in-house and contract developers and will contribute valuable know-how to the development of new Mediaport products and features.

SONJA by Mediaport Systems, Jun 2025

Where to Buy

Please contact us for details of certified sales partners relevant to your industry and / or location. Where none exist, we will send you a quotation directly.

We're looking for Value-Added Resellers, Systems Integrators, and OEM Partners. Please contact us for more information.

Company Info

Mediaport Systems Ltd
Company number 1466 2727.
Registered Office 31 Lee View
Enfield EN2 8RY.

VAT GB468201004
EORI GB468201004000

CONTACT
sales@mediaportsystems.com

WEB
www.mediaportsystems.com

LINKEDIN
www.linkedin.com/company/mediaport-systems